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31108	3 7590 03/09/2006		EXAMINER	
PAUL J. SUTTON, ESQ., BARRY G. MAGIDOFF, ESQ. GREENBERG TRAURIG, LLP 200 PARK AVENUE			BENENSON, BÓRIS	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

2) Motice of Draftsperson's Patent Drawing Review (PTO-948)

Paper No(s)/Mail Date 10/19/2004.

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Paper No(s)/Mail Date. _

6) Other: _

5) Notice of Informal Patent Application (PTO-152)

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Detailed Actions Claim Objections

1. Claim 32 is objected to because of the following informalities: Claim language indicates, "that protection is available", but there is no antecedent basis in the claim.

Appropriate correction is required.

2. Claim 33 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 29-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim language of independent Claim 29

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indicates, "tripping means coupled to operate the fault circuit interrupter to electrically disconnect the receptacle from the plug upon the opening of the neutral conductor". In opinion of Examiner it may indicate that tripping means will disconnect the receptacle from the plug immediately upon the opening of the neutral conductor. Such feature is not supported by the Specification. It possible to read the language that the tripping means are capable to operate the fault circuit interrupter even in case when the neutral line is open/broken between a power source and the plug. Such interpretation has support in the Specification. Claims 30-31 don't correct the indefiniteness.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-5, 9, 12, and 14 rejected under 35 U.S.C. 102(b) as being anticipated by Campolo et al. (5,642,248). Campolo et

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al. teach an Electrical Extension Cord With Built-In Safety Protection. The cord comprises an electrical cable (Fig. 1, Pos. 4) with a first end electrically connected to a plug (8) having phase and neutral blades (9a, 9b), receptacle connected to the second end of the cable, and a fault circuit interrupter (6) located inside the plug. Insulated phase, neutral and ground conductors surrounded by a conductive sensing shield (Fig 2A, Pos. 20). A leakage current collected by the shield enables operation of the circuit interrupter to electrically disconnect the receptacle from the plug. The receptacle includes a light emitting diode (Fig. 3, Pos. D2) to indicate integrity of the cord.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-5, 9, 11-14, 33 are rejected under 35 U.S.C.

 103(a) as being unpatentable over Applicant Admitted Prior Art

 (AAPA) in view of Campolo et al. (5,642,248). Applicants

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disclose a circuit (Fig.1), comprising an electrical cable having a first and a second ends (a line side and a load side) including a phase conductor (110) and a neutral conductor (120), wherein the first end of the cable is physically connected to load side of an fault circuit interrupter (400) and the second end of the cable is physically connected to load terminals. The cable includes phase and neutral and neutral conductors and a shield. Applicants disclosed that in the Prior Art "Electrical conductors 110, 120 and 130 comprise a three wire conductor having an AC source compatible plug at the source end, the control circuit 300 and interrupter circuit 400 contained in the plug" (Page 6, Lines 24-26). AAPA disclose also a detector read on sensor (Fig.1, Pos.200) contained within the appliance. The detector comprised two conductors (210 and 220) connected to the phase and shield conductors to detect a leakage current between them. "The conductors are preferably located in proximity to a port of the appliance to be protected where water can enter" (Page 5, Lines 19-21). AAPA does not disclose a receptacle as a termination device connected to the second end of the cable; instead it is terminated inside of an appliance. Campolo et al. teach an Electrical Extension Cord With Built-In Safety Protection. The cord comprises a plug (Fig.1, Pos. 8) with build-in fault circuit interrupter (6) and a receptacle (2). The

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receptacle includes a light emitting diode (Fig. 3, Pos. D2) to indicate integrity of the cord. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified AAPR with teachings of Campolo et al. and terminate the cable by receptacle as teach Campolo et al. and locate a sensor inside the receptacle, because it will allow protection with any type of pluggable devices, detect entrance of a water into the receptacle and will indicate usability of the cord.

6. Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) in view of Campolo et al. (5,642,248) as applied to claim 1 above, and further in view of Morin (5,700,150) and Miller (5,097,099). Applicant Admitted Prior Art (AAPA) in view of Campolo et al. (5,642,248) disclose all the limitation of independent Claim 1, but didn't disclose a type (shape) of the cord to be used in the device. Morin teaches an Electrical Outlet Type Extension Cord Reel With Auxiliary Outlet, wherein a cable (Fig.1, Pos. 21) is a flat cable. Morin disclosed that "The device 1 is designed to be plugged directly into and be carried by a conventional duplex electrical wall outlet receptacle R through prongs 10" (Col.3, Lines 39-41). Morin did not disclose a shielding, placed around conductors of the cable. Miller teaches a Hybrid Branch Cable

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and Shield. The cable comprises a plurality of insulated conductors surrounded by a shield. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Applicant Admitted Prior Art (AAPA) in view of Campolo et al. (5,642,248) with teachings of Morin and Miller and provide the extension cord with flat cable as teaches Morin with shielded conductors, because flat cable for extension cord will be convenient, especially when run under a carpet, and is strong and flexible as teaches Miller.

Allowable Subject Matter

- 7. Claims 20 and 23-28 are allowed over Prior Art of record.
- 8. Claim 6-8, 10, and 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

9. Independent Claim 20 is allowable because none of the prior art of record disclose an electrical extension cord wherein impedance sensing means operate fault circuit interrupter upon detection of impedance between the shield and neutral conductors

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is less then predetermine value in combination with the other claim limitations.

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- 10. Independent Claim 23 is allowable because none of the prior art of record disclose an electrical extension cord wherein impedance sensing means operate fault circuit interrupter upon detection of impedance between the shield and a ground conductor is less then predetermine value in combination with the other claim limitations.
- 11. Independent Claim 26 is allowable because none of the prior art of record disclose an electrical extension cord wherein tripping means operate fault circuit interrupter upon opening the shield conductor in combination with the other claim limitations.
- 12. Independent Claim 32 would be allowable because none of the prior art of record disclose electrical extension cord wherein leakage current collected by the shield enables operation of the fault circuit interrupter to electrically disconnect the receptacle from the plug during either the negative or positive half cycle of an AC signal of the phase conductor in combination with the other claim limitations.
- 13. Claims 24-25 and 27-28 are dependent on allowable claims and therefore allowable.

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Contact information

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Benenson whose telephone number is (571) 272-2048. The examiner can normally be reached on M-F (8:20-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 ext 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Boris Benenson

Examiner

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